IN THE CLAIMS:

Please enter the following amendments and/or additions:

1. (*Currently Amended*) A method of routing between a source node and a destination node in a network having nodes connected by links, wherein signal compression is used on at least one of said links, wherein the method comprises:

performing at least two routing calculations for a given number of signal compressions, said routing calculations comprising a first routing calculation for a number of signal compressions less than said given number, and a second routing calculation for a given number of signal compressions using information obtained from the first routing calculation.

2. (*Previously Amended*) The method according to claim 1, wherein the method further comprises choosing a cost function and wherein the routing calculations minimize the cost function.

3. (*Currently Amended*) The method according to claim 1, wherein a routing calculation for a given number of signal compressions comprises, at a node where the number of signal compressions from the source node is equal to the given number, seeking and saving for a subsequent routing calculation adjacent links on which signal compression is used.

4. (*Currently Amended*) The method according to claim 1, wherein a routing calculation for a given number of signal compressions uses the Dijkstra algorithm and verifies the number of signal compressions when adding a node to the route.

5. (*Currently Amended*) The method according to claim 1, wherein the network further comprises overflow links to an external network, said method further comprises at least two overflow routing calculations for a given number of overflows and for a given number of signal compressions, said overflow routing calculations comprising a first overflow routing calculation for a number of overflows less than said given number, and a second overflow routing calculation for a number of overflows and a given number of signal compressions using information obtained from said first overflow routing calculation.

6. (*Previously Amended*) The method according to claim 5, wherein the method further comprises choosing a cost function representative of the cost of overflows and wherein the routing calculations minimize the cost function.

7. (*Currently Amended*) The method according to claim 5, wherein the routing calculations are effected for a given number of overflows by varying the number of signal compressions and then by varying the number of overflows.

8. (*Previously Added*) The method according to claim 6, wherein the cost function accounts for occupancy of resources in the network.

9. (*Previously Added*) The method according to claim 8, wherein the cost function accounts for charges incurred because of overflows.

10. (*Currently Amended*) A method of routing between a source node and a destination node in a network having nodes connected by links, wherein signal compression is used on at least one of said links, wherein the method comprises:

performing a first routing calculation with no signal compressions;

performing a second routing calculation for a number of signal compressions less than a given number of signal compressions; and

performing a third routing calculation for the given number of signal compressions using information obtained from the first and second routing calculations.

11. (*Previously Added*) The method according to claim 10, wherein the method further comprises choosing a cost function and wherein the routing calculations minimize the cost function.

12. (*Currently Amended*) The method according to claim 10, wherein a routing calculation for a given number of signal compressions comprises, at a node where the number of signal compressions from the source node is equal to the given number, seeking and saving for a subsequent routing calculation adjacent links on which signal compression is used.

13. (*Currently Amended*) The method according to claim 10, wherein a routing calculation

for a given number of <u>signal</u> compressions uses the Dijkstra algorithm and verifies the number of

<u>signal</u> compressions when adding a node to the route.

14. (*Currently Amended*) The method according to claim 10, wherein the network further

comprises overflow links to an external network, said method further comprises:

a fourth routing calculation for a number of overflows less than a given number of overflows;

and

a fifth routing calculation for the given number of overflows and a given number of <u>signal</u>

compressions using information obtained from said fourth routing calculation.

15. (*Previously Added*) The method according to claim 14, wherein the method further

comprises choosing a cost function representative of the cost of overflows and wherein the routing

calculations minimize the cost function.

16. (*Currently Amended*) The method according to claim 14, wherein the routing calculations

are effected for a given number of overflows by varying the number of <u>signal</u> compressions and then

by varying the number of overflows.